

GOVERNMENT OF INDIA
MINISTRY OF COMMERCE

# REPORT OF THE INDIAN TARIFF BOARD

FIRE HOSE INDUSTRY

1947

# List of Agents in India from whom Government of India Publications are available

ABBOTTABAD-English Book Store. HYDERABAD (DECCAN)-Hyderabad Book AGRA -Depot. English Book Depot, Taj Road. JAIPUR CITY-India Army Book Depot, Dayalbagh. Garg Book Co. National Book House, Jeomondi. Ramesh Book Depot, Treple Bazar. AHMEDABAD. Chandra Kant Chiman Lai Vora. JODHPUR-Mr. Dwarkadas Rathi, Book Sellers. H. I., College of Commerce Co-operative Store, JUBBULPORE-The C. P. Circulating Library & Book Depot (Regd.), Cecil East Street. New Order Book Co. AIMER-Banthiya & Co., Ltd., Station Road. AKOLA-Bakshi, Mr. M. G. KARACHI-Aero Stores. Keal & Co. LLAHABAD. LIAHABAD—
Central Book Depot, 44, Johnstonganj.
Kitabistan, 17-A, City Road.
Ram Narain Lal, 1, Bank Road.
Superintendent, Printing and Stationery, U. P.
BANGALORE—Vessrs, R. S. Book Emporium, 118,
G. H. Extension, Brasavangudi r.O.
BAREILLY—Aggarwal Brothers.
BARODA—Hony. Cannell Secretary. Press. Mcdern Brok Depot, Wadhawa Bros., Kutchery Road. KARACHI (SADAR)—Manager, Sind Government Book Depot and Record Office. Imperial Publishing Co., 99, Rallway Road.
Indian Law Agencies, Krishns Nagar.
Kansil & Co., Messrs. N. C., 9, Commercial
Buildings, The Mall.
Law Book Coy., 5, Kacheri Road.
Malhotra & Co., Messrs. U. P., Post Box No. 94.
Minerva Book Shop, Anarkali Street.
New Oxford Book Coy.
Puniah Ralicious Rook Society. BARODA-Hony. General Secretary, Singha College of Commerce Co-operative Stores, Ltd. BENARRS-Students Friends Booksellers, University Gato. BHANDARA (C. P.)-S. S. Dhara Shirkar. BOMBAY-Punjah Religious Book Society Co-operators' Book Depot, 9, Bakehouse Lane, Rama Krishna & S.ns, Anarkali. Reliance Book Stall. Lakhani Book Depot, Bombay, 4. New Rook Co., Kitab Mahai, 188-90, Hornby Superintendent, Govt. Printing, Punjab. Technical and Commercial Book Co. Road. Popular Book Depot, Grant Road. Safety Rook Shop, Safety First Association of University book Agency, Kacheri Road. LYALLPUR-Proprietor, The Lyall Book Depot Circular Road, India, Fort. Superinten lent, Govt. Printing & Stationery, LUCKNOW—Upper India Publishing Honse, Ltd.,
Literature Palace, Aminuddaula Park. Queen's Road, Tarprievals Sons & Co., Mesers. D. B.
Thacker & Co., Ltd.
Trimital & Co., Mosers. N. M., Princes Street, Higinbothams. Superintendent, Govt. Press, Mount Boad. Varadachary & Co., Messrs. P. Kalbadevi Road. CALCUTTA-NAGPUR Book Company. Central Law House, Tilak Road. Chatterjee & Co., 3, Bacharam Chatterjee Lane. Khot & Sons, Messrs. G. G., Sita Buldi, 3rd Modi Das Gupta & Co., 54/3, College Street.
Hinds Library, 69-A, Balaram De Street.
Labiri & Co., Ltd., Mesara. S. K.
Newman & Co., Ltd., Mesars. W.
R. Cambray & Co., Kent House, P 33, Mission Superintendent, Govt. Printing, Central Provinces. NEW DELHI-Bhawnani & Sons, Connanght Place. Jaina Book Agency, Connaught Place.
Jaina Book Agency, Connaught Place.
Saraswati Book Depot, 15, Lady Hardinge Road.
PATNA—Superintendent, Government Printing,
Bihar, P. O. Gulzarbagh.
PATNA CITY— Row Extension. Roy Chowdhury & Co., Messrs. N. M., 72, Harrison Road. Sarcar & Sons, Messrs. M. C., 15, College Square. Sarkar & Sons, Ltd., Messrs. S. C., 1/1/1-O, Col-Lakhsmi Trading Co., Padri-ki-Haveli Raghmath Prasad & Sons, PESHAWAR lege Square. Standard Law Book Society, 721-A, Hazra Lane, Rash Behari Avenue P. O. London Book Co. (India), Arbab Road.
Manager, Govt. Printing & Stationery, N.-W. F. P.
PESHAWAR CANTT.—Faqir Chard Marwah. Thacker, Spink & Co. (1933), Ltd. CAWNPORE. CUTTACK-Press Officer, Orissa Secretariat. DEHRA DUN-Jagal Kishore & Co. POONA-Deccan Bookstall, Fergusson College Road. Dastane Bros., Home Service, 466, Rawiwar Peth. International Book Service. DELIII-Central Book Depot, Kashmere Gate, Pederal Law Depot, Kashmere Gate, Frank Brothers, Chandal Chowk. QUETTA—Standard Bookstall. RAJKOT—Mohanlal Dossabhai Sha'). RAWALPINDI—Ray & Sons, Messis. J., 43, K. & Imperial Book Depot and Press, Near Jama Mas-jid (Machhilwalan). jid (Machhilwalan).
In:lian Army Book Depot, Daryaganj.
Jaina & Bros., Messes. J. M., Mori Gate.
Metropoliton Book Co., Faiz Bazar, Delhi.
Oxford Book and Stationery Co.
Toung Man & Co. (Regd.), Regerton Road.
DEVGAD BARIA-Joshi, Mr. V. G., News Agent
(vid Piplod):
FEROZEPURE—English Book Depot.
GWALIOR—Jain & Bros., Messes. M. B., Sarafa
Road. L. Edwards Road.
ROORKEE—Proprietor, The Cambridge Book Depot. SHILLONG—Superintendent, Assam Secretariat SIALKOT CANTT.—Clifton & Co. SRINAGAR—Reina Newsagency. TRICHINOPOLY FORT—Krishnaswami & Co., Mesers. S., Toppskulam.
VELLORE—Venkatasubban, Mr. A., Law Book-Road.

# CONTENTS

| Para | graph                        |          |  | •         |          |            |     | Page. |
|------|------------------------------|----------|--|-----------|----------|------------|-----|-------|
| . 1  | Application for protection s | and ref  | erence to  | the Board | ••       | ••         |     | 1     |
| 2    | Terms of reference           |          | ••   | ••        | ••       | ••         | ••  | 1     |
| 3    | Method of inquiry            | • •      | ••   | ••        | ••       | ••         | ••  | 2     |
| 4    | History of the industry      | ••       | ••   | ••        | ••       | . ••       | • • | 3     |
| 5    | Process of manufacture       | ••       | ••   | ••        | • •      | ••         | • • | 2     |
| 6    | Uses of the product          | ••       | ••   | ••        | ••       | ••         | • • | 3     |
| 7    | Statistics relating to impor | ts       | ••   | ••        | ••       | ••         | ••  | 8     |
| 8    | Estimated demand             |          | ••   | ••        | ••       | ••         |     | 3     |
| 9    | Indigenous production        | ••       | ••   | ••        | ••       | ••         | ••  | 3     |
| 10   | Quality                      | ••       | ••   | ••        | ••       | ••         | ••  | 3     |
| 11   | Cost of production and fair  | eselling | g price  | ••        | ••       | ••         | ••  | 5     |
| 12   | Existing rate of customs d   |          |  | W         | ••       | ••         | • • | 5     |
| 13   | C.i.f. price and landed cost |          |  |           | ••       | ••         | ••  | 5     |
| 14   | Comparison of fair selling   |          | with land  | led cost  | ••       | ••         | ••  | 6     |
| 15   | No protection or assistance  |          | The Party of the P |           | • •      | ••         | • • | 6     |
| 16   | Steps to be taken by the n   |          | GUEST CLT  |           | • •      | ••         | • • | 6     |
| 17   | Summary of conclusions as    |          | The Part of the last of the la | ions      | ••       | ••         | • • | 7     |
| 18   | Acknowledgments              | ••       |  | 444       |          | . ••       | ••  | 8     |
|      |                              | Ar       | PENDICES   |           |          |            |     |       |
|      | IList of firms or bodies     |          |  |           |          |            | ••  | 9     |
|      | IIList of persons who w      | ere inv  | ited to be   | present a | t the pr | ıblic inqu | iry | 11    |
|      | IIIC.i.f. price and lande    |          | विकासिक  | 1 101     | ••       | ••         |     | 12    |

## PERSONNEL OF THE BOARD

MR. C. C. DESAI, C.I.E., I.C.S.-PRESDENT.

DR. NAZIR AHMAD, O.B.E.-MEMBER,

DR. H. J. DEY, D.Sc. (LOND.).-MEMBER.

KHAN BAHADUR K. UBAIDULLAH, O.B.E.-MEMBER.

Mr. M. AHMADULLAH, B.A. (Cantab.), Barrister-at-Law.-Secretary.

### PERSONNEL OF THE PANEL WHICH HEARD THIS CASE.

Mr. C. C. DESAI, C.I.E., I.C.S.—PRESIDENT.

DR. NAZIR AHMAD, O.B.E.-MEMBER.

DR. H. L. DEY, D.Sc. (LOND.).-MEMBER.

# Report

regarding the

# Grant of Protection to the Sericultural Industry.

#### CHAPTER I.

# The World Position of the Silk Industry.

7. The report of the Indian Tariff Board regarding the grant of protection to the Sericultural Industry in India, which was published in 1933 contains a full account The position prior to of the history of the industry in India prior to that date, and the world factors by which it was affected. Before we proceed to the examination of the changes which have occurred since 1933, we describe briefly the course of the industry prior to that date with particular reference to India. We do not propose to go further back than 1875. Prior to that year the silk industry in India was on the whole in a prosperous condition with an annual export of silk at times exceeding 2,000,000 lbs. In 1875 the ravages of a silk worm disease now identified as having been Pebrine in Bengal and probably also in Kashmir and Mysore were primarily responsible for a decline in the industry which then commenced. industry was completely wiped out in Kashmir and survived with difficulty in Mysore. In Bengal the competition of other crops, particularly jute, with mulberry, and the changes of fashion in Europe contributed to the decline. The industry was resuscitated in Kashmir in 1895, but it was not until 1915 that it received a new lease of life in Mysore. During the early years of the twentieth century the principal feature was the gradual loss of its export market by Bengal, and the growing importance of exports from Kashmir. During this period the industry benefited as a whole from the rising prices of Indian agricultural produce and the consequent increase in the internal demand for silk. After an initial set back prices of raw silk were well maintained during the Great War, and the post-war boom saw a period of great prosperity, prices, which reached their peak in 1922, attaining to unprecedented levels. Assisted by the fall of the rupeesterling exchange prices remained at a remunerative level until 1928. In the following year the industry was overtaken by a

- 3. On 28th November, 1945, the Board issued a press communiqué inviting associations, persons and firms, including Method of inquiry. producers. importers. and consumers interested in the industry or depending upon it for their stores, who wished their views to be considered, to submit their representations. The Board also issued detailed questionnaires to producers, importers, consumers and associations. A list of those to whom questionnaires were issued and those who replied thereto will be found in Appendix I. The Bengal Belting Works at Rishra, Serampore, was visited by Dr. H. L. Dey, a Member of the Board, on 8th January, 1947. Mr. R. N. Kapur and Mr. R. Sundaram, Board's Technical Adviser and Cost Accounts Officer respectively, visited the Bengal Belting Works from 25th June to 30th June, 1947 for the purpose of preparing an estimate of the cost of production. Oral evidence of the representatives of producers, importers, consumers and associations was heard at Bombay on 16th July, 1947. The names of witnesses, who were examined at the hearing will be found in Appendix IT.
- 4. Before the war, the Bengal Belting Works was manufacturing flax fire hose, flax being imported from abroad. History of the industry. During the war, due to the difficulty of importing ilax, cotton jacket rubber-lined fire hose was produced by the Bengal Belting Works, Serampore, and Buckingham and Carnatic Mills, Madras. When imports of flax from abroad were severely restricted during wartime, the two Indian manufacturers, after a good deal of research, were able to produce cotton jacket rubber-lined fire hose and their entire output of fire hose was taken up by the Defence Services for fire fighting purposes. The requirements of fire hose by the civilian authorities, municipalities and A.R.P. organizations were met entirely from imports. This industry may be regarded as a pre-war industry, which was, however, largely developed during wartime. The initiative for manufacturing rubberized fire hose, as a substitute for flax hose, came from Government, who assisted the factories by granting priorities in respect of machinery and raw materials and also by absorbing their entire output of fire hose. The raw materials required for this industry are flax yarn or, failing it, cotton yarn and rubber. the last two being available in the country. It must, however, be mentioned that of the two factories, which produced fire hose during wartime, the Buckingham and Carnatic Mills are no longer interested in it. As for the Bengal Belting Works, this firm has also given up production of fire hose on account of its inability to meet competition from flax fire hose imported from abroad. It is, therefore, the case of an industry, which was developed during wartime and still retains the capacity for production, but is now out of production.
- 5. The rubber-lined fire hose, manufactured by the Bengal Belting Process of manufacture. Works, is a woven cotton hose, made from cotton yarn; and the inner surface of the hose is lined with a heavy layer of rubber. The weaving operation is similar to that of solid woven cotton beltings. The yarn which is supplied in hanks, is cheesed, multi-plied, twisted and beamed for being used as warp yarn. Similarly, weft yarns are light twisted and wound over pirns. Weaving

is carried out on special looms, which are slightly different from those used for ordinary weaving operations. After the woven hose is ready, the inner surface is coated with latex compound and then vulcanised in long steam chambers. It is finally tested for standard pressure, and if found suitable, despatched to the consumer.

- 6. Fire hose is used for fire fighting purposes by fire brigades, haruses of the product. bour authorities, railways; factories, municipal corporations, etc.
- 7. Fire hose is not classified separately in the Account of Sea-borne Statistics relating to imports.

  Trade. The Department of Industries and Supplies, Government of India, has stated in a memorandum on the subject that pre-war imports of fire hose amounted to approximately 450,000 ft. per annum; in the year 1944, fire hose to the extent of 485,000 ft. was imported,—455,000 ft. trom the U.K. and 49,500 ft. from the U.S.A. In the first six months of 1945, about 500,000 ft. were imported.
- 6. From the figures of imports, which were the main source of supply in the pre-war period, it would appear that the pre-war demand for fire hose in the country was in the neighbourhood of 500,000 ft. only. The Department of Industries and Supplies, Government of India, has estimated that the postwar demand for fire hose would amount to about a million feet per annum.
- 9. The Bengal Belting Works claims to have manufactured about one million feet of fire hose during 1941-45. Indigenous production. The figures of output at Buckingham and Carnatic Mills during wartime are not available. The present capacity of the Bengal Belting Works is about 450,000 ft., the sizes being  $2\frac{1}{4}$  in.,  $2\frac{1}{2}$  in. and  $2\frac{3}{4}$  in. The representatives of the firm informed the Board at the public inquiry that with slight alterations looms for belting can be converted for the production of fire hose in case of need. As a matter of fact, the Bengal Belting Works converted 11 of its belting looms for producing fire hose during wartime, so as to raise its total production of fire hose to one million feet. We are informed by the representatives of foreign manufacturers that solid woven beltings and fire hose are, as a rule, produced in the same factories in the U.K., belting looms and fire hose looms being mutually convertible with minor alterations.
- 10. As stated in paragraph 4, cotton jacket rubber-lined fire hose produced by the Bengal Belting Works was a wartime substitute approved by Government for the requirements of the Defence Services. As the entire output of fire hose in the Indian factories was taken up by the Defence Services, there was no opportunity for their use by the most important class of users, viz., the fire brigades. In its replies to the questionnaires issued by the Tariff Board, the Calcutta Fire Brigade has stated that it has never used the Indian-made fire hoses. The Commissioner of the Bombay Municipality has stated that the

Indian-made fire hose, unlike the imported hoses, was made on a flat loom instead of a circular loom, that it contained weak seams along the folds, that it did not stand up to sudden or high pressures and that it had no processing safeguard against mildew. It was also said that the rubber-lining given to the Indian hoses was crudely done and was inclined to stick when the hose was flat. The Bombay Fire Insurance Association has stated that the Indian fire hose does not conform to either of the two specifications, recognised in India, viz., I.S.D. specification No. G. Misc. 57-B and HQIM. 812. B, both of which stipulate that fire hose should be made from long staple flax yarn. Since flax canvas hose is not manufactured in India and the indigenous hose, manufactured from cotton yarn on a flat loom, has been found to be unsatisfactory in many respects for fire fighting purposes, the representatives of the Bombay Fire Iusurance Association, Bombay, the Chief gineer, Bombay Port Trust, and the Chief Officer, Bombay Fire Brigade Headquarters, Bombay, who were present at the public inquiry, were unanimous that the Indian-made fire hose was not at all suitable for fire fighting purposes. The consensus of opinion among the consumers would thus seem to be that the Indian-made rubberlined cotton hose did not satisfy the requirements of important firefighting organizations. The representatives of the Bengal Belting Works, however, contended that they had installed nine special looms for producing fire hose at the express request of Government, and that they produced fire hose acceptable to the Defence Services during wartime. They also contended that those who complained of the Indianmade fire hose being unsuitable had used rubberized hose instead of the rubber-lined type which was the correct type and which should have been used for fire fighting purposes. The Bengal Belting Works also produced certificates from the Calcutta Fire Brigade, the Chief Inspector of Stores and Clothing, Cawnpore, the Inspector of General Stores, Cawnpore, and the Examiner of Stores, Indian Stores Department (Textiles), Calcutta Circle, showing that the samples of fire hose submitted for tests by the Bengal Belting Works stood up to a pressure of over 200 lbs. per sq. inch, and were satisfactory in respect of construction, weight per linear inch and the quality of rubber. The position, therefore, is that while the Inspectorate of General Stores, Government of India, was quite satisfied with the quality of fire hose manufactured by the Bengal Belting Works, and encouraged the firm to produce it on a large scale, the representatives of fire brigades and fire insurance companies, who did not have much chance of using the cotton jacket rubber lined fire hose, expressed an adverse opinion on its quality. We, therefore, consider that the available evidence on the matter is not conclusive, but we do feel that it would be desirable that the matter should be examined further from the technical point of view. We recommend, therefore, that the Bengal Belting Works should get their samples of fire hose duly examined by representatives of important fire fighting organisations, such as the Fire Brigades of Bombay and Calcutta. We understand that about 100,000 feet of fire hose are lying in the stocks of the Bengal Belting Works, and we suggest they should send adequate samples to the Fire Brigades of principal towns, such as, Calcutta, Bombay, Madras and Delhi for

necessary performance tests, and that the matter should be re-opened if necessary, when the reports of these fire brigades are available.

- 11. (a) The Bengal Belting Works, Rishra, Serampore, was costed cost of production and for the purpose of preparing an estimate of tair selling price.

  cost of production and fair selling price of fire hoses, which were being manufactured in the same factory side by side with solid woven cotton and hair beltings. As the representatives of the firm desired that their cost figures should be treated as confidential, they were discussed in camera and are not included in this report, but submitted to Government in a separate confidential enclosure to this report.
- (b) The cost figures actually available to the Cost Accounts Officer were, as in the case of cotton and hair beltings, those for the year 1944-45. On the basis of these figures and after making certain adjustments for increase in the cost of raw materials and wages, an estimate has been prepared of cost of production and fair selling price for the period 1947-48 to 1949-50. As these adjustments have been, made on the same lines as in the case of cotton and hair beltings, the particulars are not given here.
- (c) The estimate of fair selling price per linear foot of 2½ in. diameter fire hose for the period 1947-48 to 1949-50 comes to Rs. 1-1-6 per foot.
- 12. Rubber-lined fire hose is governed by item 39(1) and unlined Existing rate of customs flax hoses by item 53 of the Indian Customs Tariff. Relevant extracts from the Indian Customs Tariff (27th issue) are reproduced below:—

| Item<br>Ne. | Name of article.  | of                 | The state of the s | if the      | ential rate<br>article is t<br>or manufa | he pro- | of pro-          |
|-------------|---|--------------------|--|-------------|--|---------|------------------|
|             |   | duty.<br>मन्त्रम्ब | duty.  | The<br>U.K. | A<br>British<br>colony.                  | Burma.  | tective<br>duty. |
| 39(1)       | Rubber tyres and tubes and<br>other manufactures of rubber<br>not otherwise specified, exclud-<br>ing apparel and boots and<br>Shoes. | Reve-<br>nue.      | 30%<br>ad<br>valorem   | ••          |  | 12%     |                  |
| 53          | Textile manufactures not otherwise specified.   | Do.                | Do.  | ••          | ••                                       | Do.     |                  |

<sup>13.</sup> Figures of recent c.i.f.. prices and landed costs of fire hoses

C.i.f. price and landed will be found in Appendix III. The latest and lowest figures for c.i.f. prices and landed costs, which were available to us, are as follows:—

 2½" × 12 ply flax fire hose.
 Rs. as. p.

 C.i.f. price
 ...
 1 4 5

 Duty. 30 per cent.
 ...
 0 6 2

 Landing and clearing charges
 ...
 0 0 3

 Landed cost
 ...
 1 10 10

# 14. Per linear foot of 2½" diameter fire hose.— Comparison of fair selling price with landed co.t.

|                    |                      |           |      | Rs.  | as.              | p.    |
|--------------------|----------------------|-----------|------|------|------------------|-------|
| (a) C.i.f. price   | • •                  | • •       | • •  | 1    | 4                | 5     |
| (b) Clearing char  | ges                  | • •       | • •  | 0    | 0                | 3     |
| (c) Landed cost e  | x-duty               | • •       | • •  | 1    | 4                | 8     |
| (d) Duty at 30 p   | er cent. on c.i.f.   | ••        | • •  | 0    | 6                | 2     |
| (e) Landed cost    | •                    | • •       |      | 1    | 10               | 10    |
| (f) Fair selling   | price                | • •       |      | 1    | 1                | 6     |
| (g) Difference bet | ween (c) i.e., la    | nded cest | ex-  |      |                  |       |
| duty, and (        | f) i.c., fair sellir | ıg price  |      | 0    | 3                | 2     |
| (h) (g) as perce   | ntage on c.i.f.      | • •       |      | 15.5 | per              | cent. |
| (i) Difference bet | ween (e), i.e., la:  | nded cost | with |      |                  |       |
| duty and (f)       | i.e., fair selling   | price     | •    | 0    | 9                | 4     |
| (j) (i) as percent | tage on c.i.f.       | • •       |      | 45.7 | peı <sup>.</sup> | cent. |

In regard to the statement given above, we may point out that, while the imported fire hose is made from flax yarn, the Indian fire hose is made from cotton yarn and the two articles are not strictly comparable in respect of quality. A correct comparison would have been possible if the Indian manufacturers had been able to manufacture fire hose from flax yarn.

No pretection or assistance recommended. The estimated fair selling price of indigenous fire hose is appreciably lower than the present landed cost ex-duty and 45.7 per cent. lower than the landed cost with duty. It is thus seen that the indigenous fire hose industry does not need any protection ou the basis of cost-price comparison. Even if the fair selling price of the indigenous product were higher than the landed cost without duty, the industry's case for protection could not be supported, because its quality has not proved acceptable to the most important class of consumers, viz., fire brigades and fire insurance associations. We, therefore, do not recommend the grant of protection to this industry.

16. As we have stated in paragraph 10, the cotton jacket rubbersteps to be taken by the lined fire hose manufactured by the Bengal Beltmanufacturers. In Works, though approved and accepted by the Defence Services during wartime, has hardly been tested or used by the most important group of civilian consumers, namely, the fire brigades; nor has this type been approved by the fire insurance associations, because in their opinion it does not come up to the specifications recognised in this country. Unless these principal consumers are satisfied with the quality of the indigenous fire hose, the claim of the indigenous fire hose industry to protection or assistance cannot be accepted. We were given to understand during the public inquiry that the Bengal Belting Works has stocks of fire hose to the amount of 100,000 linear feet. We suggest that adequate samples from

the stocks should be submitted to the principal fire brigades for necessary performance tests and report. If the reports are satisfactory, then the manufacturers of fire hose may commence production once again, and if they find that they cannot compete with imported fire hose, they may approach Government again for instituting an inquiry into their claim for protection.

- 17. Our conclusions and recommendations are as under :—
  Summary of conclusions
  and recommendations.
- (i) Cotton jacket rubber-lined fire hose was produced during wartime by the Bengal Belting Works, Serampore, and Buckingham & Carnatic Mills, Madras, as a substitute for flax hose and it proved acceptable to the Defence Services of the country. The initiative in this matter came from Government, who assisted the factories by granting priorities in respect of machinery and raw materials and who absorbed their entire output of fire hose. (Paragraph 4).
- (ii) Flax yarn or failing it, cotton yarn and rubber are the principal raw materials required for the industry, the last two being available in the country. (Paragraph 4).
- (iii) Buckingham and Carnatic Mills are no longer interested in the production of fire hose. The Bengal Belting Works has also given up the production of fire hose on account of its inability to meet competition from imported flax fire hose, but it has the necessary equipment for production of cotton jacket rubber-lined fire hose and can start production again if required. (Paragraph 4).
- (iv) The pre-war consumption of fire hoses in the country has been estimated at 500,000 feet per annum, and the present demand at about a million feet per annum. (Paragraph 8).
- (v) The present rated capacity of the Bengal Belting Works is about 450,000 feet per annum, the sizes being  $2\frac{1}{4}$ ",  $2\frac{1}{2}$ " and  $2\frac{3}{4}$ ", but the capacity can be increased appreciably by converting some of the belting looms for the purpose of manufacturing fire hose, the looms being mutually convertible with minor alterations. (Paragraph 9).
- (vi) The available evidence regarding the quality of the indigenous fire hoses is not conclusive, and it is desirable that the matter should be further examined from the technical point of view. (Paragraph 10).
- (vii) No protection or assistance is recommended for the industry because its quality has not proved acceptable to important classes of consumers, viz., fire brigades and fire insurance associations. (Paragraph 15).
- (viii) Adequate samples of fire hose should be submitted by the manufacturers to the principal fire brigades for necessary performance tests. If their reports are satisfactory, the manufacturers of fire hose may commence production once again and if they find that they cannot compete with imported fire hose, they may approach Government again for instituting an inquiry into their claim for protection. (Paragraph 16).

18. The Board wishes to thank Dr. P. K. Kapre, of the Department Acknowledgments. of Industries and Supplies, Mr. M. Ahmadullah, Secretary to the Board, Mr. R. N. Kapur, Board's Technical Adviser, Mr. R. Sundaram, Cost Accounts Officer, attached to the Board, and Dr. Rama Varma, Assistant Secretary to the Board, for their help in connection with the inquiry.

C. C. DESAI,
President.

NAZIR AHMAD,
Member.

H. L. DEY,
Member.

M. AHMADULIAH, Secretary. Bombay, 11th August, 1947.



#### APPENDIX I

#### LIST OF FIRMS OR BODIES TO WHOM QUESTIONNAIRES WERE SENT:

In addition to all the Directors of Industries, Provincial Governments, recognised Chambers of Commerce and Trade Associations, relevant questionnaires were sent to the following known producers, importers and consumers of fire hose:—

#### A .- Producers :

- Assam Bengul Rubber Works, 11, New Tangra Road, Calcutta.—Not replied.
- Bengal Belting Works Ltd., 2, Dalhousie Square East, Calcutta.— Replied.
- 3. Birkmyre Brothers Limited, 4, Dalhousie Square, Calcutta.—Replied.
- 4. Buckingham & Carnatic Co. Ltd., Armenian Street, G. T., Madras.—Replied.
- Calcutta Rubber Manufacturing Co., 27, Stephen House, Dalhousie Square East, Calcutta.—Replied.
- 6. Card Clothing & Belting Ltd., J. K. Building, Graham Road, Ballard Estate, Bombay.—Replied.
- Hindustan Belting & Spg. Mills Ltd., Katri Bazar Road, Mahesh, Serampore.—Not replied.
- 8. India Belting & Cotton Mills Ltd., Clo Indigenous Belting Industries
  Asson, 2, Dalhousie Square East, Calcutta.—Not replied.
- 9. Indigenous Belting Industries Association, 2, Dalhousie Square East,
  Calcutta.—Not replied.

### B.—Importers :

- 1. Balmer Lawrie & Co., Ltd., 103, Clive Street, Calcutta.—Replied.
- 2. Bird & Co., Chartered Bank Bldg., Calcutta.-Not replied.
- 3. Card Clothing & Belting Ltd., J. K. Building, Graham Road, Bombay.
  —Replied.
- Dodge & Seymour (India) Ltd., Laxmi Building, Ballard Estate, Bombay.—Replied.
- 5. Garlick & Co., Ltd., Haines Road, Jacob Circle, Bombay.—Not replied.
- Good Year Tyre & Rubber Co. (India) Ltd., 7-9, Mathew Road, Bombay.—Not replied.
- 7. Kilburn & Co. Ltd., 4, Fairlie Place, Calcutta.—Not replied.
- 8. Lee & Muirhead (India) Ltd., 12, Rampart Row, Bombay.-Replied.
- 9. Lewis & Tylor Ltd., 6, Church Lane, Calcutta.—Replied.
- 10. Leyland & Birmingham Rubber Co. (India) Ltd., 12, Mission Row, Calcutta.—Replied.
- 11. McGavin & Co., Calcutta.—Not replied.
- 12. McGregor & Balfour Ltd., Calcutta.—Not replied.
- 13. Roberts McLean & Co. Ltd., 101, Clive Street, Calcutta,-Replied.
- 14. William Jacks & Co. Ltd., Bombay.—Not replied.

#### C. Consumers :

- 1. Bird & Co., Chartered Bank Bldgs., Calcutta.-Not replied.
- 2. Bombay Fire Insurance Association, 6, Rampart Row, Fort, Bombay.—Replied.

## C. Consumers :- contd.

- 3. Bombay Port Trust, Bombay.—Replied.
- 4. The Commissioners for the Port of Calcutta, Calcutta.-Replied.
- 5. Municipal Commissioner, Bombay Municipality, Bombay.—Replied.
- 6. Commissioner, Corporation of Calcutta, Calcutta.—Replied.
- 7. Commissioner, Corporation of Madras, Madras.—Not replied.
- Director of Fire Services, Egmore, Madras.—Replied.
   Card Clothing & Belting Ltd., J. K. Bldg., Graham Road, Ballard Estate, Bombay.—Replied.
- 10. Calcutta Fire Brigade, 13-D, Free School St., Calcutta.-Replied.
- 11. Fire Brigade Headquarters, Byculla, Bombay.—Replied.
- 12. Fire Salvage Association of Bombay Ltd., 6, Rampart Row, Fort, Bombay.—Replied.
- 13. Indian Jute Mills Association, 8, Royal Exchange Place, Calcutta. Replied.
- 14. Mather & Platt Ltd., 7, Hare Street, Calcutta.—Replied.
- 15. Thomas Duff & Co., Ltd., 3, Clive Row, Calcutta.—Replied.

#### APPENDIX II.

### FIRE HOSE INDUSTRY Place of inquiry—Bombay.

Date of inquiry-16th July, 1947.

List of persons who attended the inquiry (vide paragraph 3).

#### Producers :

- Mr. S. C. Dey, Mr. S. K. Chackrabarti, Mr. M. R. Kaura, representing Bengal Belting Works, Ltd. Calcutta.
- Mr. S. C. Dey, Mr. G. A. C. Tovey, representing Indigenous Belting Industries Association, Calcutta.
- Mr. G. A. C. Tovey, representing Birkmyre Bros: Ltd., Calcutta.
- Mr. B. D. Vidyarthi, representing Engineering Association of India.

#### Importers :

Mr. F. W. Alexander, representing Lewis & Tylor Ltd. Calcutta, Leyland & Birmingham Rubber Co. (India) Ltd., Calcutta, Robert McLean & Co. Ltd., Calcutta, McGavin & Co., Calcutta, McGregor & Balkour Ltd., Calcutta, Balmer Lawrie & Co. Ltd., Calcutta.

#### Consumers :

- Mr. K. F. Taylor, representing Bombay Fire Insurance Association, Bombay.
- Mr. P. E. Golvala, representing Chief Engineer, Bombay Port Trust, Bombay.
- Mr. N. Coombs, representing Chief Officer, Bombay Fire Brigade Headquarters,
- Mr. L. D'Mello, representing Assistant Controller of Stores, G. I. P. Railway, Bombay.
- Mr. F. W. Alexander, representing Mather & Platt, Ltd., Calcutta, and Thomas Duff & Co. Ltd., Calcutta.

#### Officials.

Dr. P. K. Kapre, representing Dy. Development Officer, Department of Industries and Supplies, New Delhi.

C. I. F. PRICES AND LANDED COS

|                                   | !                                 |                | 23" Country                            | 24" Country of origin U. K.                                     | 7. K.     |                 |            |                               | 2. Count                      | 22" Country of origin U. K.   | U.K.            |                |          |
|-----------------------------------|-----------------------------------|----------------|--|---|-----------|-----------------|------------|-------------------------------|-------------------------------|---|-----------------|----------------|----------|
| Sise                              | Lewis & Taylor                    | ylor           | Leyland<br>Birmin-                     | Balmer Lawrie   | AWTIG     | Robert MoLeans  | oleans     | Lewis & Leyland Taylor Birmin | Leyland<br>Birmin-            | Balmer<br>Lawrie  | Robert McLeans  | foleans        |          |
| <br>                              | 21. flax<br>fire cose<br>unlined. | 2£"×12<br>ply. |  | 24 London made No. 1 quality (Merry. weather fiax canvas hose). | 24 strand | 24°×<br>18 ply. | 24. ×. py. |                               |                               | London<br>made No.<br>I Quality<br>(Mexry-<br>weather<br>flax can-<br>vas hose) | 25°×<br>18 ply. | 24°×<br>24 ply | <u>.</u> |
| Date to which the figures relate, | %I-10-46                          | 29-3-47        | Early<br>1946.                         | 6-3-47  | 6.3.47    | 13-8-40         | 13-8-46    | ÷                             | Early<br>1946.                | 6-3-47  | 13-8-46         | 13-8-46        |          |
| C. L. F.                          | *                                 | 1 4 5          | 1 7 1                                  | 1 5 4   | 1 8 11    | 1 4 0           | 154.7      | :                             | 1 8 10                        | 174   | 1 5 5           | 1 6 0          |          |
| • Duty (30%)                      | 21<br>20<br>0                     | 51<br>3<br>3   | 0 4 0                                  | 9 0   | 0 7 8     | 0 8 0           | 0 6        | :                             | 0 7 7                         | 0 1 0   | 9 9 0           | 0 6 7          |          |
| Landing and clearing              | **********                        | 0              | (Includ-<br>ing<br>landing<br>charges) | . 0   | 0         | 0 1 4.          | 0 1 4      | . ;                           | (Including landing charages.) | .004  | 0 1 5           | 0 1 5          |          |
| nded cost                         | 1 10 10                           | 1 10 10        | 1 14 1<br>Present                      | 1 12 0  | 6 0 67    | 1111            | 1 12 0     | :                             | 2 0.5<br>Present              | 1 14 8  | 1 13 3          | 1 14 0         | _        |
|                                   |                                   |                | 1/94d.<br>Landed                       |   |           |                 |            |                               | 1/111d.<br>Landed             |   |                 |                |          |
|                                   |                                   |                | wend                                   |   |           |                 |            |                               | cost<br>would<br>then be      |   |                 |                |          |
|                                   |                                   |                | Re. 1-9-4.                             |   |           |                 | ·          |                               | Re. 1-11-9                    |   |                 |                |          |

175 B - 865 6.1 49 - 41PE

|   | اسالف مقبسيون     | , 77<br>12. |          |          | กั  | ***   |      |      |      | 'n    |                                       |
|---|-------------------|-------------|----------|----------|---|-------|------|------|------|-------|---------------------------------------|
| Port Bom- Cal. Kara Mad. Bari. Cal. bay, cutta. chi. ras. bay. cutta. | nd. Beri-<br>bay. | Cal. K      | chi. rs. | P. Bous- | Kara- Mad- Bous- Cal. · · Kara- Mad- Bous- Cal. Kara- Mad-<br>obi. ras. bay. eutta. chi. ras. bay. sutta. obi. ras. | Kara- | Mad- | Bom. | Cal. | Kara. | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 |
| TA FLAT HOSE  |                   | र<br>सर्    |          | 0        |   |       | 02.7 |      |      |       | 14 %                                  |

The Collector of Custons, Bombay Las given the e.if. for 24" to 3" as Re. 2-2-0 per foot for 1947. The Collector of Gustons, Karseki has given the c.if. for 1947 as 1.9.6. (He is unable to specify the sizes.)

